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NOTICE OF ALLOWANCE AND FEE(S) DUE

2202

7590

06/23/2009

BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747 EXAMINER
CHU, YONG LIANG
ART UNIT PAPER NUMBER

1626

DATE MAILED: 06/23/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/590,976	08/28/2006	Yasuyuki Suzuki	3939-0120PUS1	2609

TITLE OF INVENTION: COMPOSITION CONTAINING BENZAMIDINE DERIVATIVE AND METHOD FOR STABILIZING BENZAMIDINE

DERIVATIVE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	09/23/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

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INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

Note: A certificate of mailing can only be used for domestic mailings of the CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address) Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission. 2292 7590 06/23/2009 Certificate of Mailing or Transmission BIRCH STEWART KOLASCH & BIRCH I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below. PO BOX 747 FALLS CHURCH, VA 22040-0747 (Depositor's name (Signature (Date APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 10/590,976 08/28/2006 Yasuyuki Suzuki 3939-0120PUS1 2609 TITLE OF INVENTION: COMPOSITION CONTAINING BENZAMIDINE DERIVATIVE AND METHOD FOR STABILIZING BENZAMIDINE DERIVATIVE APPLN. TYPE SMALL ENTITY ISSUE FEE DUE PUBLICATION FEE DUE PREV. PAID ISSUE FEE TOTAL FEE(S) DUE DATE DUE nonprovisional NO \$1510 \$300 \$0 \$1810 09/23/2009 **EXAMINER** ART UNIT CLASS-SUBCLASS CHU, YONG LIANG 1626 514-232800 1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). 2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. or agents OR, alternatively, (2) the name of a single firm (having as a member a ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required. registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type) PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment. (A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY) 4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above) 4a. The following fee(s) are submitted: lssue Fee A check is enclosed. Publication Fee (No small entity discount permitted) Payment by credit card. Form PTO-2038 is attached. The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number ______ (enclose an extra copy of this fo Advance Order - # of Copies _ (enclose an extra copy of this form). 5. Change in Entity Status (from status indicated above) a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ■ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2). NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office. Authorized Signature Date Typed or printed name Registration No. This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

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10/590,976	08/28/2006	Yasuyuki Suzuki	3939-0120PUS1	2609	
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PO BOX 747			ART UNIT	PAPER NUMBER	
FALLS CHURCH, VA 22040-0747			1626		
			DATE MAILED: 06/23/2009		

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 107 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 107 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

	Application No.	Applicant(s)	Applicant(s)		
	10/590,976	SUZUKI ET AL.			
Notice of Allowability	Examiner	Art Unit			
	YONG CHU	1626			
		•			
The MAILING DATE of this communication appear All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIOF of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED or other appropriate comr GHTS . This application is	in this application. If not includ nunication will be mailed in due	ed course. THIS		
1. This communication is responsive to <u>03/26/2009</u> .					
2. The allowed claim(s) is/are <u>1-8</u> .					
3. Acknowledgment is made of a claim for foreign priority ur a) ☐ All b) ☐ Some* c) ☐ None of the: 1. ☐ Certified copies of the priority documents have	- , , ,) or (f).			
□ Certified copies of the priority documents have □ Certified copies of the priority documents have		tion No			
3. Copies of the certified copies of the priority does not be certified. 3. Copies of the certified copies of the priority does not be certified.			tion from the		
International Bureau (PCT Rule 17.2(a)).	samente nave been receiv	ca iii ano national otago applica			
* Certified copies not received:					
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.					
4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.					
5. CORRECTED DRAWINGS (as "replacement sheets") mus	st be submitted.				
(a) ☐ including changes required by the Notice of Draftspers	on's Patent Drawing Revi	ew (PTO-948) attached			
1) 🔲 hereto or 2) 🔲 to Paper No./Mail Date					
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date					
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).					
6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.					
Attachment(s)	E 🗆 Notice of	Informal Datant Application			
 Notice of References Cited (PTO-892) Notice of Draftperson's Patent Drawing Review (PTO-948) 	<u> </u>	Informal Patent Application Summary (PTO-413),			
	Paper No	o./Mail Date			
3. Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date	7. 🔀 Examiner	's Amendment/Comment			
4. Examiner's Comment Regarding Requirement for Deposit of Biological Material		's Statement of Reasons for Allo			
	9. ☑ Other <u>Dra</u>	wings on 08/28/2006 are accep	<u>ted</u> .		



Application No.

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DETAILED ACTION

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 03/26/2009 has been entered. Upon entering the submission, claims 1-8 are currently pending in the instant application, and claims 6-8 remain withdrawn as non-elected subject matter.

Response to RCE Submission

Claim rejection under 35 U.S.C. § 103a

Applicants have amended claims 1-5 by further limiting "a composition" according to claim 1 to "a solid composition". In addition, Applicants argue that the previously cited the '730 patent by Suzuki and FDA Drug Application No. NDA #019437 merely disclose an oral or inject composition. Applicants' amendment and argument have been fully considered, and found persuasive. Furthermore, the instant Specification identifies the problem to be solved by the invention in paragraph [0004] and Fig. 1 of the Drawings. Due to the coexistence with a formulation additive under humidification/heating conditions in a solid state, a decomposition product is sometimes generated by a reaction as shown in FIG. 1:

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decomposition pattern is specifically related to the instantly claimed composition

according to claim 1. In addition, as demonstrated in paragraphs [0044]-[0053], the claimed limitation of at least one type of electrolyte of halide salts according to claim 1 plays a critical role in reducing decomposition of a compound of the formula (I) according to claim 1. Such a criticality is not taught or suggested in either the `730 patent nor the FDA Drug Application No. NDA #019437, or the combining teaching of the references. Based on STN search of a composition comprising a compound related to the formula (I), there is no prior art teaching of using electrolyte halide salts for stabilizing the claimed solid composition. Therefore, the rejection is hereby withdrawn.

Claim rejection under Obviousness-type of Double Patenting

The ODP rejection is also withdrawn based on the same analysis under 103(a) rejection.

Status of the Claims

Applicants' amendment overcomes the claim rejections. Search and examination are expanded to the previously withdrawn non-elected subject matter under Groups (I) and (III). The product claims and method of use claims are rejoined.

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Because a claimed invention previously withdrawn from consideration under 37 CFR 1.142 has been rejoined, the restriction requirement among groups I-III as set forth in the Office action mailed on 02/12/2008 is hereby withdrawn. In view of the withdrawal of the restriction requirement as to the rejoined inventions, applicant(s) are advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, a claim that is allowable in the present application, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Once the restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. See *In re Ziegler*, 443 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

Examiner's amendment

An examiner's amendment to the record with the authorization by Applicants' representative John W. Bailey dated 06/16/2009 appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

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In claim 3, the second line from bottom, insert -- and -- after

In claim 6, line 8, $\underline{\text{delete}}$ "[" before "wherein R¹ and R² are the same as or different from each other..";

In claim 6, line 18, <u>delete</u> ".]" after "..R⁵, R⁶ and R⁷ represent hydrogen atoms or C1-4 alkyl groups".

In claim 7, the second line from bottom, insert -- and -- after

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Reasons for Allowance

The present inventions are drawn to a solid composition comprising a

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benzamidine derivative of the formula (I)

pharmacologically acceptable salt thereof; and at least one type of electrolyte selected from the group consisting of halide salts of alkaline mental or alkaline earth metal and alkaline metal salts or alkaline earth metal salts of perchloric acid, and a method for stabilizing a benzamidine derivative of the formula (I).

The closest prior art of record is the `730 patent by Suzuki et al.

The `730 patent disclose a pharmaceutical composition comprising a compound of the formula (I). However, the `730 patent does not teach a solid composition further comprising an electrolyte of halide salts which is critical for reducing decomposition of the instantly claimed composition.

Conclusions

Claims 1-8 are allowed.

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Telephone Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yong Chu, Ph.D, whose telephone number is 571-272-5759. The examiner can normally be reached on 7:00 am - 3:30 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph K. M[©]Kane can be reached on 571-272-0699. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Status Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Yong Chu/ Patent Examiner Art Unit 1626